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DISTRICT COUNCIL

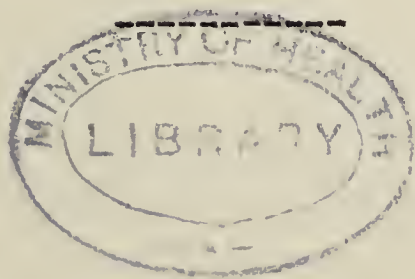
ANNUAL REPORT


of the

MEDICAL OFFICER OF HEALTH

A. McINNES, M.B., D.P.H.

1953 and 1954





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RAUNDS URBAN DISTRICT

Chairman, 1953: K.W.Hall, Esq.,
1954: W.H.Marment, Esq.

Clerk: B.M.Killick

Public Health Officers

Medical Officer of Health: A.McInnes, M.B., D.P.H.
Sanitary Inspector & Surveyor: G.Whittam, F.I.A.S., M.R.S.I.

Area of District: 6,483 acres

PARTICULARS of Separate Dwellings, Population, Rateable Value and
Product of 1d. Rate.

		Dwellings	Population	Rateable Value £	Penny Rate £. s. d
1953	...	1,583	4,663	20,108	76. 14. 5.49
1954	...	1,618	4,690	20,662	78. 17. 5.15

Mr.Chairman,

A report on the health of the District for the years 1953 and 1954 is given herewith. In a previous report there was a description of Raunds Urban District, its natural environment and its social make-up. The Urban District is on the fringe of the boot and shoe manufacturing area, represented typically by Rushden, and spills into the agricultural part of the county, represented by Thrapston. Its boundary runs with the agricultural county of Huntingdon. Although preponderantly industrial Raunds has many agricultural interests.

Birth Rate.

The number of births and a series of rates are given below. Up to 1950 only crude Birth Rates could be given, but for 1950 and afterwards a comparability factor has been issued so that standard Birth Rate = crude Birth Rate x comparability factor. For Raunds the comparability factor for 1953 was 1.08 and for 1954, 1.17.

Live Births.

TOTAL LIVE BIRTHS in Raunds Urban District :-

					1953		1954	
					M	F	M	F
Legitimate	...	...	...	...	40	26	35	34
Illegitimate	...	...	...	...	0	0	2	2
TOTAL	...	...	...	...	40	26	37	36

Illegitimate rate per 1,000 Live Births 0.0 54.8

BIRTH RATES per 1,000 of population :-

Raunds U.D.C. - Crude	...	...	...	15.28	15.5
Standard	...	...	...	16.5	18.13
England and Wales	...	...	...	15.5	
Administrative County	...	...	...	16.16	

Still Births.

					1953		1954	
					M	F	M	F
Legitimate	...	...	...	...	0	1	2	0
Illegitimate	...	...	...	...	0	0	0	0
TOTAL	...	...	...	...	0	1	2	0

Rate per 1,000 of Live and Still Births :-

Raunds Urban District	...	...	...	15.0	26.6
England and Wales	...	...	...	22.4	

Rate per 1,000 of population :-

Raunds Urban District	...	...	...	0.2	0.42
England and Wales	...	...	...	0.35	

Death Rate.

Below are given the number of deaths and a table of death rates per 1,000 of population. A Comparability Factory has been given so that Crude Death Rate x Comparability Factor = Standard Death Rate. The necessity of this factor for the purposes of comparison is due to an unequal distribution of age groups and also, to a lesser degree, of the sexes. For example: Bournemouth and Cheltenham are more likely to have a greater number in the older age groups than say Coventry or Wigan, where most are of the earning ages. Females have a greater expectation of life than males.

A classification of the causes of death is given in tables at the end of the report.

Number of Deaths.

						1953	1954
Males	...	...	...	...	...	26	23
Females	...	...	...	...	...	15	21
TOTAL	...	...	...	...	...	<u>41</u>	<u>44</u>

In 1953 there were 10 and in 1954, 19, inward transfers of persons normally resident in Raunds who died in hospital or while temporarily resident away from home.

Analysis of ages at death were :-

						1953	1954
Over 90	...	...	...	...	...	1	3
80 - 90	...	...	...	...	...	11	15
70 - 80	...	...	...	...	...	14	12
60 - 70	...	...	...	...	...	7	7
50 - 60	...	...	...	...	...	5	5
30 - 40	...	...	...	...	...	1	0
Under 1	...	...	...	...	...	<u>2</u>	<u>2</u>
						<u>41</u>	<u>44</u>

DEATH RATE :-

						1953	1954
Raunds Urban District - Crude	...	...	...	...	...	8.8	9.38
Standard	...	...	...	...	...	7.2	7.41
England and Wales	...	...	...	...	...	11.4	
Administrative County	...	...	...	...	...	11.51	
Comparability Factor 1953	=	0.82					
" " 1954	=	0.79					

Maternal Mortality.

The yearly number of births is too small to give a reliable figure of comparison with a populous area or of the trend when compared with figures for the whole of England and Wales. There has been no death associated with childbirth since 1935, the year of the formation of the District.

During 20 years only 5 cases of Puerperal Pyrexia have been notified.

Infantile Mortality Rate.

A special table at the end of this report gives Rates since 1935, the year of the inclusion of Stanwick in the District.

NUMBER OF DEATHS UNDER ONE YEAR OF AGE -

						1953	1954
						M	F
Legitimate	...	...	...	...	...	2	0
Illegitimate	...	...	...	...	...	0	0
TOTAL	...	...	...	...	...	<u>2</u>	<u>0</u>

RATES PER 1,000 LIVE BIRTHS :-

Raunds Urban District	...	...	...	...	...	30.0	27.3
England and Wales	...	...	...	...	...	26.8	
Administrative County	...	...	...	...	...	24.7	
Legitimate death rate per 1,000 legitimate births	...	...	...	...	...	30.0	29.0
Illegitimate death rate per 1,000 illegitimate births	...	...	...	...	...	0.0	0.0

In 1953 both deaths were under 4 weeks.

In 1954 there was no death under 4 weeks.

Cancer.

The number of deaths for the years of the report are given in the table of causes of death to be found at the end of the report.

Infectious Diseases are now treated at Harborough Road Hospital, Northampton, where an ambulance is stationed.

Diphtheria.

A table of statistics for the District is appended.

Year	Estimated Population		No. of Births	Immunised		Notifications	Deaths
	Under 5	5 - 15		Under 5	5 - 15		
1941	305	765	58	139	565	0	0
1942	280	650	73	61	13	0	0
1943	280	650	71	72	68	0	0
1944	328	651	88	36	24	1	0
1945	341	598	80	47	24	0	0
1946	328	565	89	43	10	0	0
1947	340	540	98	39	7	0	0
1948	355	550	77	69	14	0	0
1949	360	563	65	54	6	0	0
1950	360	593	53	36	8	0	0
1951	380	635	67	50	3	0	0
1952	N.K.	N.K.	55	48	4	0	0
1953	N.K.	N.K.	66	55	1	0	0
1954	N.K.	N.K.	73	52	21	0	0

Since 1935 only 9 cases of Diphtheria have been notified and there was one death in the year 1935.

IMMUNISATION IN RELATION TO CHILD POPULATION.

	Under 1	1	2	3	4	5-9	10-14	Total
Age -								
at 31/12/45	0	25	28	41	42	270	402	808
at 31/12/46	2	18	34	32	49	240	392	767
at 31/12/47	2	28	24	35	34	238	370	731
at 31/12/48	6	42	37	29	39	231	335	719
at 31/12/49	1	38	54	41	34	222	314	704
at 31/12/50	1	31	41	55	45	218	296	687
at 31/12/51	0	35	44	40	58	212	263	652
at 31/12/52	4	21	37	44	44	218	257	625
at 31/12/53	7	35	37	39	45	223	243	629
at 31/12/54	16	32	36	38	39	239	229	629

Scarlet Fever.

					1953	1954
Number notified	...	...	...	...	4	3
Number died	...	...	...	...	0	0
Notification rate per 1,000 -						
Raunds Urban District	...	...	...	...	0.86	0.64
England and Wales	...	...	...	...	1.39	
Death rate per 1,000 -						
Raunds Urban District	...	...	...	...	0.0	0.0
England and Wales	...	...	...	...	N.K.	N.K.

Erysipelas.

					1953	1954
Number notified	...	...	...	...	3	0
Number died	...	...	...	...	0	0

Pneumonia.

					1953	1954
Number notified	...	...	...	...	5	3
Number died	...	...	...	...	1	2
Notification rate per 1,000 -						
Raunds Urban District	...	...	...		1.07	0.64
England and Wales	...	...	...		0.84	
Death rate per 1,000 -						
Raunds Urban District	...	...	...		0.21	0.42
England and Wales	...	...	...		0.55	

Pneumonia is not often notified so that no relationship exists between the number notified and the number of deaths.

Typhoid and Paratyphoid.

There were no notifications.

Cerebro-Spinal Fever.

There were no notifications.

Measles.

					1953	1954
Number notified	...	...	...	...	144	0
Number died	...	...	...	...	0	0
Notification rate per 1,000 -						
Raunds Urban District	...	...	...		30.88	0.0
England and Wales	...	...	...		12.36	
Death rate per 1,000 -						
Raunds Urban District	...	...	...		0.0	0.0
England and Wales	...	...	...		N.K.	N.K.

Whooping Cough.

					1953	1954
Number notified	...	...	...	...	1	21
Number died	...	...	...	...	0	0
Notification rate per 1,000 -						
Raunds Urban District	...	...	...		0.21	4.47
England and Wales	...	...	...		3.58	
Death rate per 1,000 -						
Raunds Urban District	...	...	...		0.0	0.0
England and Wales	...	...	...		0.01	

Acute Poliomyelitis and Polio-encephalitis.

					1953	1954
Number notified	...	...	...	...	0	0
Number died	...	...	...	...	0	0
Notification rate per 1,000 -						
<u>Paralytic</u>						
Raunds Urban District	...	...	...		0.0	0.0
England and Wales	...	...	...		0.07	
<u>Non-paralytic</u>						
Raunds Urban District	...	...	...		0.0	0.0
England and Wales	...	...	...		0.04	
Death rate per 1,000 -						
Raunds Urban District	...	...	...		0.0	0.0
England and Wales	...	...	...		0.01	

Deaths from Diarrhoea and Enteritis under two years of age.

There was no death in 1953 or 1954.

Influenza.

					1953	1954
Number of Deaths	...	...	...	...	1	0
Rate per 1,000 population -						
Raunds Urban District	...	...	...		0.21	0.0
England and Wales	...	...	...		0.16	

Tuberculosis (Pulmonary).

NOTIFICATIONS - 1953	Four males, aged 45, 21, 10 and 9, and one female, aged 16.
1954	Four males, aged 70, 34, 21 and 12, and one female, aged 28.
DEATHS - 1953	Nil.
1954	Nil.

Tuberculosis (Non-respiratory).

There were no notifications and no deaths from this cause in 1953 or 1954.

Tuberculosis - Number on Register.

At the end of 1953 there were on the Register 24 respiratory cases and 5 non-respiratory cases, and on 31st December, 1954, 29 respiratory and 7 non-respiratory cases.

Puerperal Pyrexia.

					1953	1954
Number notified	...	...	...	...	0	1
Number died	...	...	...	...	0	0

Water Supply.

Raunds gets its water from wells sunk in the gravel of the Nene Valley. The position of the wells is a compromise between the two considerations of sufficiency of supply and prevention of contamination by flooding of the valley in winter. Before 1941 Raunds supply was not treated in any way, now the water is both filtered and chlorinated. It should be understood that treatment makes the water safer under varying conditions. Chlorine can be used in a range of 0.1 to 5.0 parts per million without unduly tasting the water provided the larger doses are necessary by reason of flooding. Over many years chemical and bacteriological analyses have been remarkably uniform and indicate a water of high purity.

National Assistance Act, 1948.

No action was taken by the Council under Section 47.

A.McINNES

Medical Officer of Health.

STATISTICAL TABLES 1953-54.

Table No.1

CAUSES OF DEATH

Causes of Death				1953			1954		
				Total	M	F	Total	M	F
1	Tuberculosis, respiratory	...		0	0	0	0	0	0
2	Tuberculosis, other	...	...	0	0	0	0	0	0
3	Syphilitic diseases	...	...	0	0	0	0	0	0
4	Diphtheria	...	...	0	0	0	0	0	0
5	Whooping cough	...	...	0	0	0	0	0	0
6	Meningeal Infections	...	...	0	0	0	0	0	0
7	Acute Poliomyelitis	...	...	0	0	0	0	0	0
8	Measles	...	...	0	0	0	0	0	0
9	Other Infective and Parasitic diseases	...	...	0	0	0	0	0	0
10	Malignant Neoplasm, Stomach	...		2	2	0	0	0	0
11	" " Bronchus			0	0	0	0	0	0
12	" " Breast	...		1	0	1	0	0	0
13	" " Uterus	...		2	0	2	0	0	0
14	Other Malignant and Lymphatic Neoplasms	...		1	1	0	3	2	1
15	Leukaemia, aleukaemia	...		0	0	0	0	0	0
16	Diabetes	...	...	0	0	0	2	1	1
17	Vascular lesions, nervous system			5	3	2	6	3	3
18	Coronary disease, angina	...		4	3	1	5	3	2
19	Hypertension with Heart Disease			0	0	0	1	1	0
20	Other Heart Disease	...	...	9	4	5	8	4	4
21	Other Circulatory Disease	...		2	0	2	2	0	2
22	Influenza	...	...	1	0	1	0	0	0
23	Pneumonia	...	...	1	1	0	2	1	1
24	Bronchitis	...	...	4	3	1	2	1	1
25	Other Diseases of Respiratory system	...	...	0	0	0	0	0	0
26	Ulcer of Stomach and Duodenum			1	1	0	0	0	0
27	Gastritis, Enteritis, Diarrhoea			0	0	0	0	0	0
28	Nephritis and Nephrosis	...		1	1	0	0	0	0
29	Hyperplasia of Prostate	...		2	2	0	0	0	0
30	Pregnancy, Childbirth, Abortion			0	0	0	0	0	0
31	Congenital malformations	...		1	1	0	1	1	0
32	Other defined and ill defined disease	...		4	4	0	9	4	5
33	Motor Vehicle accidents	...		0	0	0	1	1	0
34	All other accidents	...	...	0	0	0	1	0	1
35	Suicide	...	...	0	0	0	1	1	0
36	Homicide and Operations of War			0	0	0	0	0	0
TOTAL ALL CAUSES			...	41	26	15	44	23	21

A TABLE OF BIRTH RATES AND DEATH RATES FROM SPECIAL CAUSES SINCE THE
FORMATION OF THE DISTRICT ON 1st APRIL, 1935.

Estimated Population		Births		All Ages				DEATHS			
		Births		Under 1		Pulm. Tubercu.		Non-Pulm. Tubercu.		Cancer	
		No.	Rate per 1000	No.	Rate per 1000 Births	No.	Rate per 1000 Pop.	No.	Rate per 1000 Pop.	No.	Rate per 1000 Pop.
1935	...	45	10.6	1	22.0	1	0.22	0	0.00	6	1.4
1936	...	62	14.0	3	48.0	4	0.90	0	0.00	12	2.7
1937	...	65	14.7	1	15.0	4	0.90	0	0.00	12	2.7
1938	...	63	14.2	1	16.0	4	0.90	0	0.00	5	1.1
1939	...	55	12.3	3	59.0	0	0.00	0	0.00	7	1.6
1940	...	65	14.21	2	30.0	1	0.22	0	0.00	2	0.4
1941	...	58	10.7	3	51.0	2	0.37	1	0.18	7	1.3
1942	...	73	14.1	0	0.0	4	0.77	0	0.00	9	1.7
1943	...	71	14.7	6	84.0	2	0.41	0	0.00	9	1.8
1944	...	85	20.7	3	36.0	1	0.23	1	0.23	12	2.8
1945	...	80	18.9	4	50.0	2	0.47	0	0.00	9	2.1
1946	...	89	20.4	5	56.0	1	0.23	0	0.00	7	1.6
1947	...	98	22.2	6	61.0	1	0.22	0	0.00	10	2.6
1948	...	77	17.18	5	65.0	1	0.22	0	0.00	8	1.8
1949	...	65	14.3	3	46.0	0	0.00	0.	0.00	8	1.8
1950	...	53	12.8	3	57.0	0	0.00	0	0.00	6	1.3
1951	...	67	16.0	1	15.0	2	0.43	0	0.00	10	2.2
1952	...	55	13.1	2	36.0	1	0.22	0	0.00	10	2.2
1953	...	66	16.5	2	30.0	0	0.00	0	0.00	6	1.3
1954	...	73	18.13	2	27.3	0	0.00	0	0.00	3	0.6
AVERAGE FOR 20 YEARS: 1935-54											
Raunds Urban District England and Wales		1365	16.0 17.0	56	40.0 38.0	31	0.33 N.K.	2	0.02 N.K.	158	1.7 N.K.

Birth Rate, Raunds 1951, 1952, 1953 and 1954 is Standard Rate.

Death Rate is Standard Rate except for years 1941, 1942, 1943, 1944, 1945, 1946, 1947 and 1948.

Pulmonary Tuberculosis Death Rate England and Wales - 1948 = 0.51, 1949 = 0.45, 1950 = 0.36, 1951 = , 1952 = 0.24, 1953 = 0.2.

Table No.3

MONTHLY INCIDENCE OF INFECTIOUS DISEASES

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Measles	1953	15	81	11	36	1	0	0	0	0	0	0	0	144
	1954	0	0	0	0	0	0	0	0	0	0	0	0	0
Whooping Cough	1953	0	0	0	0	0	0	0	1	0	0	0	0	1
	1954	0	0	0	0	2	1	11	3	4	0	0	0	21
Diphtheria	1953	0	0	0	0	0	0	0	0	0	0	0	0	0
	1954	0	0	0	0	0	0	0	0	0	0	0	0	0
Scarlet fever	1953	0	0	0	0	0	0	0	0	1	0	2	1	4
	1954	0	0	0	0	0	0	0	0	1	0	0	2	3
Enteric fever	1953	0	0	0	0	0	0	0	0	0	0	0	0	0
	1954	0	0	0	0	0	0	0	0	0	0	0	0	0
Pneumonia	1953	1	4	0	0	0	0	0	0	0	0	0	0	5
	1954	0	0	2	0	0	0	1	0	0	0	0	0	3
Erysipelas	1953	0	1	0	2	0	0	0	0	0	0	0	0	3
	1954	0	0	0	0	0	0	0	0	0	0	0	0	0
Puerperal Pyrexia	1953	0	0	0	0	0	0	0	0	0	0	0	0	0
	1954	0	0	0	0	0	0	0	0	0	0	1	0	1
Cerebro-spinal fever	1953	0	0	0	0	0	0	0	0	0	0	0	0	0
	1954	0	0	0	0	0	0	0	0	0	0	0	0	0
Anterior poliomyelitis	1953	0	0	0	0	0	0	0	0	0	0	0	0	0
	1954	0	0	0	0	0	0	0	0	0	0	0	0	0
Ophthalmia Neonatorum	1953	0	0	0	0	0	0	0	0	0	0	0	0	0
	1954	0	0	0	0	0	0	0	0	0	0	0	0	0

SANITARY INSPECTOR'S REPORT.

The last report, which covered the two years 1951 and 1952, contained some details of action taken by the Council under Slum Clearance procedure to deal with unfit houses. It showed that 233 houses had been dealt with by the end of the period, 143 in Clearance Areas and 90 as individually unfit. 140 houses had been pulled down, 16 had been closed, 42 had been made fit and 22 were vacant awaiting demolition. The remaining 13 houses were occupied, 4 of them outstanding from Clearance Orders and due for demolition, 3 were to be reconditioned and 6 were to be closed according to the terms of undertakings given by their owners.

In the two years covered by this report, 1953 and 1954, another twelve of these 233 houses were demolished, another three were closed and of the four occupied houses outstanding from Clearance Orders only one was tenanted at the end of 1954. Further action was taken with regard to the three houses awaiting reconditioning on their owner's undertaking and as a result two were pulled down and the other was made fit. One of the previously closed houses was also made fit and was reoccupied so that at the end of 1954 the position with regard to slum clearance action taken prior to December, 1952, could be summarised as follows :-

Action completed :

- 152 houses had been demolished.
- 18 houses had been closed on undertakings not to re-let.
- 25 houses had been made fit.
- 18 houses had been converted into nine and made fit.

Action not completed :

- 1 house to be demolished still occupied.
- 3 houses to be closed still occupied.
- 16 houses vacant pending demolition.

Details of the outstanding cases from which this summary of incomplete action is taken are :-

Clearance Areas.

- Area No.21. Three houses, Nos.33, 35 and 37 Grove Street, Raunds.
3 houses vacant pending demolition.
- Area No.22. Five houses, Streather's Yard, Raunds.
5 houses vacant pending demolition.
- Area No.26. Four houses, Rooksby's Yard, Raunds.
1 house vacant pending demolition. (3 demolished.)
- Area No.27. Three houses, Nos.9, 11 and 13 Midland Road, Raunds.
3 houses vacant pending demolition.

Individual Unfit Houses.

- Three houses, Nos.36, 38 and 40 Grove Street, Raunds.
All vacant pending demolition.
- Two houses, Nos.1 and 3 Church Street, Raunds.
1 house still occupied at end of 1954.
1 house vacant pending demolition.
- One house, No.39 Grove Street, Raunds.
To be closed, but occupied at end of 1954.
- Two houses, Nos.26 and 28 Thorpe Street, Raunds.
2 houses to be closed, but occupied at end of 1954.

Further action.

In addition to the action noted above the Council dealt with several houses as individually unfit and took slum clearance procedure in the following cases :-

No.86c High Street, Raunds.

House closed on owner's undertaking not to re-let until it has been made fit to Council's satisfaction.

No.7 The Hollow, Stanwick.

House closed on similar undertaking.

No.85 Brook Street, Raunds.

House closed.

Nos.10, 12 and 14 Thorpe Street, Raunds.

3 houses demolished.

Nos.4 and 6 Thorpe Street, Raunds.

2 houses to be closed, but occupied at end of 1954.

These eight brought the total number of houses dealt with officially by the Council under the 'Slum Clearance' acts to 241 of which 198 have been, or are to be, demolished or closed.

389 day-to-day housing inspections were done and informal representations were made to owners, either by letter or by personal contact, concerning structural defects of various kinds in 214 cases, defective sanitary accommodation at 28 houses, defects of water supplies or fittings at 18 houses and defects in drainage arrangements at 11 houses. Generally this informal action is successful, but it was found necessary towards the end of 1954 to ask for a Statutory Notice, eventually complied with, to be served on the owner requiring roof repairs at five houses in Marshalls Road at Raunds.

Post War Housing.

The Council's post war housing programme originally consisted of 230 houses, 198 to be built in the Raunds Ward and 32 in the Stanwick Ward. The programme was commenced by the erection of ten prefabricated houses at Raunds in 1946 and since then and up to the end of 1952, 158 permanent houses had been built, 124 at Raunds and 34 in Stanwick. Another 22 houses were completed during 1953 and 1954, 16 at Raunds and 6 at Stanwick, bringing the total of post-war Council houses up to 190, including the ten prefabs. The Council also have 218 houses built before the last war, 173 at Raunds and 45 at Stanwick.

Twenty-eight houses and a pair of old people's bungalows were under construction at the end of the period on the London Road Housing Site at Raunds and six houses were nearing completion on the Dolben Avenue site at Stanwick. These two sites are now fully developed and in 1954 the Council bought another $7\frac{1}{4}$ acres of land off Marshalls Road in Raunds, part to be used for housing and the remainder as a Playing Field.

Twelve private enterprise houses were erected in the two years covered by the report.

Improvement Grants.

In 1954 the Council began to operate the provisions of the Housing Act, 1949, and at the end of the year had agreed to make four grants for improvements of existing houses. Two related to tenanted houses, the other two being for owner-occupied premises.

The first grant related to a farm cottage vacant at the time of the application and on which statutory action was pending to prevent its being occupied again in its condition at the time. The cottage is of considerable value to the farm as an employee's home and the owners, after being informed of the Council's requirements to make the house fit, decided upon a thorough reconditioning scheme which included the insertion of a damp proof course in all the walls, increasing the height of rooms, the installation of indoor water with sink, the installation of bath and indoor sanitation, hot water supply, new cooking and washing facilities, food store, new drainage arrangements, yard paving and structural repairs. The cost of these improvement works, as distinct from ordinary repairs, was £717 and a grant of £358 was made. As a result the cottage was saved from demolition and was turned into a satisfactory

unit of housing accommodation at a much less charge on public funds in the long run than its replacement by a new house would have meant. The second tenanted cottage was improved by the addition of a bathroom with indoor water supply, indoor sanitation and hot water supply and a grant of £90 was made towards the cost of works which, with repairs and other structural alterations not eligible for grant, cost £410. The two grants made in respect of the owner occupied houses were for conversions of existing bedrooms into bathrooms with hot water and indoor sanitation. One grant was for £56 towards a total cost of £133, the other was for £73 towards a total cost of £200.

Water Supply.

No developments have taken place since the last report in connexion with our water supply at the source. We take our water from the valley gravels alongside the River Nene the extraction being from four wells, one 10 feet in diameter and 16 feet deep, one 10 feet in diameter and 22 feet deep, one 16 feet in diameter and 16 feet deep and one 16 feet in diameter and 22 feet deep. The yield, as is common with shallow wells, varies according to the time of year and according to the amount of rainfall, but in the two years of the report it was always well above the demand.

Duplicated pumping plant consisting of a ram pump driven by a deisel oil engine and a centrifugal pump driven by an electric motor is used to lift the water from the wells to a service reservoir from which it is distributed throughout the area. The reservoir has a capacity of 250,000 gallons and is a brick lined concrete surface tank with a flat concrete roof.

The water is treated by filtration through three pressure filters and is afterwards chlorinated by the addition of a solution of sodium hypochlorite and a stabilising agent injected into the filtered water by autominor pumps operating on the shunt feed principle. The same apparatus injects a solution of sulphate of ammonia just prior to sterilisation and a solution of aluminio ferric into the raw water to act as a coagulent in the pressure filters.

The dosage rate of chlorination is maintained at about 0.5 part per million and this rate has always given a residual chlorine value never less than 0.1 part per million in each of the four comparator tests taken daily.

A Bacteriological Examination report by the Public Health Laboratory Service of the Northampton General Hospital on a sample of the town's water taken from a domestic tap on 2nd December, 1954, was :-

Probable number of coliform bacilli, MacConkey,	
2 days, 37 degrees C	0. per 100 ml.
Probable number of faecal coli	0. per 100 ml.

Remarks: Very satisfactory.

A Chemical Examination report by the Public Analyst at Cambridge on a sample taken on 12th May, 1954, was :-

Physical Characters	Good
Reaction	pH 7.2

<u>The sample contained :-</u>	<u>parts per 100,000</u>
Chloride	9.70
Ammonia (Free and Saline)	0.0008
Ammonia (Albuminoid)	0.0050
Oxygen absorbed in 3 hours at 37 degrees C.	0.0427
Nitrates (expressed as Nitrogen)	0.20
Nitrites	absent
Poisonous metals	absent
Total Hardness (Clark)	37.2

Bacteriological Examination.

Coliform organisms absent in 100 mls.

Number of microorganisms developing on Agar at 37 degrees C. ... Nil

Number of microorganisms developing on Agar at 21 degrees C. ... Nil

Microscopical Examination of Deposit.

None.

Inference.

The results obtained on the analysis of this sample do not show any evidence of pollution with harmful organic or inorganic matter. I am of opinion that this water is fit for drinking purposes.

(signed) S.GREENBURGH
Public Analyst.
18th May, 1954.

At the reservoir there is an elevated steel tank of 23,000 gallons capacity and with a top water line 63 feet above ground level which provides the necessary head for a gravity supply in bulk to the St.Neots Rural District Council for the parish of Hargrave in Northamptonshire and the parishes of Tilbrook, Kimbolton, Stoneley, Catworth and Stow in the County of Huntingdon. The tank also gives a supply to the Raunds Station and Denford Ash areas in our own district and to a number of farms off the Hargrave Road and at Hargrave Mere which we could not supply otherwise.

Water is lifted directly into the tank from the reservoir by duplicated centrifugal pumps driven by electric motors. These pumps, which can only work singly, were rated at 3,000 gallons per hour each when they were installed, but their efficiency has declined during their years of working and their output is now no more than about 2,500 gallons an hour. They were put down in 1935 when the bulk supply scheme for the St.Neots R.D.C. was started and were then more than adequate for the duty they were expected to perform. The scheme was designed for a daily consumption of 11,000 gallons with a permissible maximum of 40,000 gallons in the event of an emergency, but as everywhere else, the consumption in the rural district has increased considerably in the twenty years the scheme has been operating. The 40,000 gallons a day maximum of 1935 is no longer even the minimum to-day. The average consumption is now between 50,000 and 60,000 gallons a day and it is years since the rural district took as little as 40,000 gallons on any whole day except when the supply was cut off because of burst mains or other breakdowns. It will be readily seen that the output of these small pumps is inadequate on occasions to meet the demand from the rural district especially when the tank and the mains are emptied as the result of bursts or when the consumption rate is high during prolonged periods of dry weather or frost. During the hard winter of 1953/54 the output of the pumps had to be supplemented on several occasions by engaging a unit of the County Fire Service to fill the tank quickly with a trailer pump operating on the reservoir cover and pumping into the top of the tank through flexible hose secured to the tank structure.

This situation will be corrected however when the improved pressure scheme for our own district is in operation. The scheme was decided upon by the Council to improve the supply in the higher parts of our district where the pressure, always low, has declined in recent years because of building development in the areas and because of the general increase in water consumption. Briefly the scheme consists of pump installations and mains alterations so as to supply the whole of our district as well as taking the St.Neots bulk supply from the elevated tank. The cost of the scheme, estimated at £650, is to be met from revenue and the work was started towards the end of 1954. The alterations to the mains have been completed and a new pump has been installed, but was not working at the end of the year. The pump is a Pulsometer 3" centrifugal pump driven by a directly coupled 11 b.h.p. electric motor and will discharge 12,000 gallons an hour from the reservoir against the tank head. The new pump operates on its own suction into the reservoir and can therefore work in parallel if necessary with one of the old pumps giving a

filling rate into the tank at between 14,000 and 15,000 gallons an hour which should be more than adequate to meet the rate of combined demands from our own and the rural district. Like the old pumps the new one will operate automatically on float switch control according to the depth of water in the elevated tank. Test runs with the new plant showed a general increase in water pressures throughout our own district of about 24 lbs per square inch which does mean a greatly improved supply particularly noticeable in the higher parts.

Except for a short extension of main on the Stanwick Housing Site there were no developments during the period in the distribution system or in connexion with the pumping plant which gave no trouble at all except the usual minor things associated with any kind of machinery.

The water mains were tapped twenty-four times for new domestic supplies, three times for new business or industrial supplies and four times for new agricultural supplies. There were also several extensions of existing services to provide separate indoor supplies in accordance with the requirements of the Water Act of 1945 and eighteen houses were provided with new sinks and indoor water in place of outside standpipes. Preliminary notices had been served requiring the same provision in another five houses.

The district is very well served by water mains and we have reciprocal arrangements with our neighbours, the Oundle and Thrapston Rural District Council, whereby under 'Fringe Orders' approved by the Ministry we supply two or three properties in their district and they supply two or three properties in our district. At the end of 1954 there were only four houses in the urban district, at isolated farm premises, not within reasonable distance of the water mains and they have satisfactory supplies of their own.

The average consumption of water per day in our own district during the two years covered by the report was 134,400 gallons for all purposes. Trade consumption accounted for about 26,500 gallons per day and the balance can be attributed to domestic consumption and a certain amount of wastage. These figures give an average consumption per head of population per day for all purposes of 29.15 gallons; i.e. 23.40 gallons for domestic purposes, etc., and 5.75 gallons for trade purposes. These figures are rather high, perhaps a little higher than they ought to be, but are interesting when compared with figures of twenty years ago. My report for 1934 gave the average daily consumption as 67,300 for all purposes in Raunds only (Stanwick was not then part of the urban district) of which about 9,000 gallons per day was attributed to trade usage and 58,300 gallons was given as the average daily consumption for domestic purposes. These figures gave an average daily consumption per head of population for all purposes of 18.63 gallons; 16.12 for domestic purposes and 2.51 for trade purposes. An all round increase of more than 50% is a little startling, but it is a very clear sign of improving standards of public health. Increased water consumption is a corollary of better housing, perhaps the most important factor in raising public health standards. There are so many more facilities for using water and I think we must expect still further increases as housing standards improve, hot water systems become more common and as indoor water supplies replace the now obsolete outside standpipes. The increase in trade consumption is probably accounted for by the very much greater use being made of the public supply for agricultural purposes and by the introduction into the town of a new industry which uses a lot of water for cooling.

Sewerage and Sewage Disposal.

There were no developments in connexion with the foul or storm water sewerage systems during the period. The foul water sewer in Spencer Parade at Stanwick became blocked owing to a very thick and unusual incrustation and its clearance caused some difficulty. This was the only trouble experienced in either system.

In my last report I referred to the need for more settling tank capacity at the Raunds Sewage Disposal Works, a need now being met. The

Council decided to have new tanks constructed which will almost double the present provision and this work was well in hand at the end of the period. The humus tank capacity ought to be increased similarly and there is an equal need for greater filter area and screening capacity. These disposal works were constructed forty or more years ago when the work they had to do was very much less than it is to-day and there has been little, if any, extension during that time. An increase of more than 50% in water consumption over the last twenty years has been noted in the last section of the report and this will have been reflected in the flow of sewage to the works. The normal water consumption is usually regarded as giving a fair indication of the dry weather flow to be expected at sewage disposal works, but at our works it is something more than that. Owing to the hardness of the town's water, and in spite of softeners and detergents, a fair amount of rainwater is still collected and used for laundry purposes and is discharged into the drains. In addition we suffer from infiltration of ground water into the sewers which, whilst reducing the strength of the sewage, does overload the works in a way and to an extent, probably not expected when they were built. There is no doubt that the works are now inadequate and they are not a little out of date. The filters deal with what water they can and the balance has to pass over the same area of land, now sewage sick. It will be seen what with one thing and another how difficult it is to produce a satisfactory effluent.

Part of the wall of one of the percolating filters collapsed under pressure from the contained media and as an experiment was replaced with a battered wall made of lump slag with a cement concrete coping. This has proved satisfactory after several months trial and it is proposed to continue this kind of walling all round both filters. The distributors began to fail from ordinary wear and tear deterioration and are being replaced.

The works at Stanwick are elementary in principle consisting of one closed and two small open settling tanks and an area of land trenched for broad irrigation of the tank effluent. The Stanwick Works are also overloaded.

House Refuse Collection.

House refuse is collected throughout the district once a week by means of a motor driven collecting vehicle of the low-loading type. The refuse is disposed of by a modified form of controlled tipping in a disused limestone quarry at Stanwick. Tipping of trade refuse is allowed there by arrangement. There have been no developments or complaints about this service in the two years but Police Court proceedings were taken in January, 1954, against two persons for 'tatting' at the tip.

Rodent Control.

In order to discharge the provisions of the Prevention of Damage by Pests Act, 1949, the Council, at the instigation of the Ministry of Agriculture and Fisheries, have entered into an arrangement with the Wellingborough Urban District Council under which we have the services of their full time Rodent Operator for an equivalent of three days a month. The services of the Operator are to supplement local action and are concerned mainly with the regular survey of premises required by the Act, but he also carries out treatments for infestations he discovers and others assigned to him. The arrangement began to operate in September, 1953, and is working satisfactorily.

In the two years of the report 783 inspections were made, 709 as a result of the survey required by the Act and the remainder following complaints or notifications, or when the properties were visited primarily for some other purpose. 687 of these inspections were of domestic properties, 46 of business or industrial premises, 20 of Local Authority property (Sewage Works, Refuse Tip, etc.) and 30 were of agricultural premises including allotments.

One major infestation by rats at the Refuse Tip, 10 minor infestations on other Local Authority property and 38 minor infestations by rats on domestic premises were dealt with either by the Rodent Operator or by the Council's own staff.

Treatment is by poisoning usually with a preparation known as Warfarin, but occasionally Red Squill, Barium Carbonate or Arsenious Oxide are used as variants according to circumstances. At the Sewage Disposal Works the method is generally to introduce Cyanide powder into the rat holes with a spoon or with a pump. Warfarin has proved to be a very successful agent for destroying rats and mice and is now probably a universal first choice in the methods of treatment. Its action is slower and less spectacular, but it has several advantages over other methods. To rats and mice its harmful effects are undetectable so that poison prejudice is overcome and continuous baiting points can be established immediately without the necessity for prebaiting with unpoisoned food. It is almost specific to rats and mice and is relatively harmless to human beings and domestic animals, a large single dose doing very little harm. Used with ordinary care it is suitable for practically every situation, which is not true of the other poisons.

Treatments of infestations on domestic premises are carried out free of charge, but occupiers of other premises have to bear the cost. Most industrial concerns in the district have private arrangements with specialist contractors for periodical inspection of their premises and for dealing with infestations as they occur and there are special arrangements with the County Agricultural Committee for dealing with infestations on farms. Our interest is therefore usually confined to the survey required by the Act. Infestations discovered on business or industrial premises are notified to the occupiers and any discovered on agricultural premises are notified to the farmer concerned and to the County Agricultural Committee. We also advise, if invited, on methods of treatment and in the event of a notification being disregarded we have to require a specified treatment to be carried out. During the period under review twelve notices were sent out relating to minor infestations of rats on agricultural premises, five for minor infestations of rats on industrial premises and one relating to a troublesome infestation of shop premises by mice which was eventually cleared by the use of specified Warfarin baits after other methods had failed.

In addition to the foregoing, the sewerage and surface water drainage systems in the streets throughout the district were tested for rat infestations. Tests were carried out four times in the period, at six monthly intervals, with sausage rusk or other baits known to be acceptable to rats placed in 24 manholes on each occasion. The results were always negative except for one occasion when a partial take of the bait occurred in a manhole in the Thorpe Street area. Repeat baits were not taken however and tests of adjacent manholes in all directions were negative.

Caravans.

A number of applications were received for licences to station moveable dwellings on sites in the district and there were three applications for site licences for twenty caravans each to meet the demand for living accommodation by U.S. Army Air Force personnel employed at airfields just outside the boundaries of the district and their families. The Council were very concerned about this unsatisfactory form of housing development and were disposed at first to reject the applications. In the end however, the housing need of these people was acknowledged and in the absence of any other accommodation it was reluctantly decided to grant short period licences based on a set of conditions drawn up after consulting the Medical Officer of Health and the County Planning Officer. These conditions require the town's water supply being available to the occupiers of the caravans and if from standpipes at the rate of not less than one standpipe for every five caravans. Each caravan has to be provided with a trapped gulley for waste water connected to a proper drainage system and separate water closets for men and women have to be provided and connected to a proper drainage system at the rate of one closet for men and one closet for women for every ten caravans or less. The caravans have to be spaced so that they are not nearer to each other than 24 feet in any direction and a properly paved approach has to be provided for each caravan. Satisfactory provision has to be made for the storage and disposal of domestic refuse and other waste materials and the owner has to make arrangements for and maintain proper supervision of the site especially in so far as the public health provisions are concerned.

One applicant could not comply with all these conditions and the site was closed, but the other two applications were merged and developed as one site for 40 caravans. A new sewer was laid to serve the site and the sanitary requirements listed were complied with. In addition a communal wash-house was provided, gas and electricity were both made available for every caravan and electric lights on the main approach path were erected. The site was fully occupied at the end of the period.

Six applications for licences for individual caravans were granted, but four were rejected because the sites were not considered suitable or because the sanitary conditions could not be complied with. Statutory action to secure the removal of caravans from an unlicensed site was begun, but was withdrawn when the caravans left.

Factories.

Thirty premises are registered as Factories, mechanical power being used in twenty-two, and there were seventeen separate sites of building operations to which the sanitary provisions of the Factories Act, 1937, applied. These factories and sites were all inspected and two non-statutory notices were sent out requiring the cleansing of sanitary accommodation. Notifications were received of thirteen outworkers.

Two certificates of satisfactory means of escape from fire were issued and proposals for new escape provisions at another factory were approved and were being erected at the close of the year. A defective store for petroleum mixtures at one of the factories was rebuilt and a smoke nuisance from another factory was abated after non-statutory notices.

Meat and Food.

Slaughtering of animals at private slaughterhouses for human consumption was resumed on 1st July, 1954, and after the conference recommended by the Minister between the Council and local butchers, meat traders and others concerned, it was decided to grant provisional licences to run for thirteen months for three slaughterhouses. The licences were conditional upon certain works being carried out immediately and their renewal is conditional upon certain other works being carried out before the expiry date. Licences to slaughter animals were issued to eight slaughtermen.

The busiest day is Wednesday, but some slaughtering is done on Tuesdays and also on Monday and Thursday evenings and occasionally at week-ends. During the period from 1st July to 31st December 139 visits were made to slaughterhouses and the carcasses and viscera were examined of 95 beasts, 8 calves, 182 pigs and 344 sheep and lambs. The forequarters of a pig and seven livers were condemned as being unfit for human food.

Routine inspections of food premises were made and the following quantities of foodstuffs were condemned and destroyed as being unfit for human consumption :-

- 56 lbs Fish
- 4 lbs Margarine
- 8 lbs Cheese
- 9 lbs Tomatoes
- 6 lbs Cooked Pork
- 10 lbs Brisket of Beef
- 36 lbs (6 tins) Corned Beef
- $2\frac{1}{2}$ lbs (1 tin) Meat and Gravy
- 13 lbs (19 tins) Mandarin Oranges
- 24 lbs (17 tins) Pineapples
- $4\frac{1}{4}$ lbs (4 tins) Peaches
- 13 lbs (7 tins) Pears
- $9\frac{1}{4}$ lbs (9 tins) Peeled Tomatoes
- 18 lbs (18 tins) Processed Peas
- $16\frac{1}{2}$ lbs (22 tins) Apricots

There are no manufacturers of Ice Cream in the district and all sales are of pre-packed products from refrigerated containers. One new licence was issued in the period bringing the total number of retailers' licences up to 18.

General.

There was one addition to the register of Petroleum Licences bringing the total number of registrations up to 20.

No disinfestations were carried out in the period for the usual kind of house vermin, but there was an interesting case of an infestation of a somewhat different nature which occurred from time to time after intervals of several weeks and lasted for some days each time. It was fairly widespread throughout the premises, probably more widespread than was realised by the tenants, because the insect which caused it was so minute. It was almost invisible to the naked eye and could only be seen in some lights when it appeared on polished top surfaces and edges of furniture as a sprinkling of very fine powder, like flour or face powder. Movements of this powder could be detected if one looked long enough and hard enough. Samples examined through a microscope were seen to be insects. The source of the infestation couldn't be traced and as ordinary methods of treatment failed to eradicate the nuisance samples of the 'powder' were collected and sent to the Murphy Chemical Company's Laboratories at Wheathampstead for identification and recommended treatment. The Company's entomologist identified the insect as *Glycyphagus domesticus*, a furniture mite, frequently associated with green Algerian fibre sometimes used for stuffing furniture. It is also found in hay. The mite actually feeds on fungi growing on the fibre, but from furniture it will often migrate to any cereal, sugar, cheese, etc. In this case the source of the infestation was probably an armchair, settee or some other article of upholstered furniture. The Company recommended a treatment which has been successful.

The district was relatively free from infectious disease and no fumigations were required.

G.WHITTAM

Sanitary Inspector and Surveyor.

